



COUNTY OF LOS ANGELES - DEPARTMENT OF HEALTH SERVICES, OFFICE OF MANAGED CARE

Bulletin No: 02-12

September 10, 2002

# Provider Bulletin

**HEALTH ALERT**

## WEST NILE VIRUS

This is to notify all Community Health Plan (CHP) Los Angeles County Department of Health Services Facilities, Contract Independent Practice Associations (IPA)/Medical Groups, and Contract Hospitals that the California State Department of Health Services, at the request of the Centers for Disease Control and Prevention (CDC), requests that the attached September 4, 2002, CDC Health Advisory entitled "Possible West Nile Virus Infection in Organ Transplant Recipients – Information for Clinicians" be disseminated to Medical Directors, Clinicians, and other appropriate staff as soon as possible. Also attached for dissemination is the California State Department of Health Services September 5, 2002, "Health Alert – West Nile Virus" communication.

The electronic version of this Provider Bulletin, including the attached CDC Health Advisory and the California State Department of Health Services communication is available at <http://ladhs.org/chp/>. After you have accessed the website, click the PROVIDER/Community Health Plan icon, and then click Bulletins to access the electronic version.

We thank you in advance for your cooperation.

State of California—Health and Human Services Agency  
Department of Health Services



California  
Department of  
Health Services

DIANA M. BONTÁ, R.N., Dr. P.H.  
Director



GRAY DAVIS  
Governor

**HEALTH ALERT - WEST NILE VIRUS**

September 5, 2002

At the Centers for Disease Control and Prevention's (CDC) request, the California's Department of Health services is forwarding the attached Health Advisory regarding a Possible West Nile Virus Infection in Organ Transplant Recipients - Information for Clinicians. In addition, DHS would like to take the opportunity of reminding our partners that September is the peak month for mosquito and arbovirus activity in California, and to emphasize the key role that health care provider community plays in identifying suspected cases of arboviral encephalitis. We encourage physicians and other health care providers to consider West Nile Virus in the differential diagnosis of aseptic meningitis, encephalitis or atypical Guillain-Barré syndrome. Diagnostic testing can be done at the California Department of Health Services (DHS) Viral and Rickettsial Disease Laboratory (free of charge). Physicians should first contact their local health department if WNV is suspected.

West Nile Virus (WNV) can cause a non-specific febrile illness, aseptic meningitis, encephalitis or atypical Guillain-Barré syndrome in humans but most infections are asymptomatic. Less than 1% of those infected develop severe illness. As of September 5, 2002, CDC has reported 737 human cases of WNV and 40 deaths in 28 states and the District of Columbia. Washington State has recently reported human cases in patients who had spent time in endemic states. It is anticipated that the West Nile Virus will arrive in California either this year or next. Surveillance is key to control and prevention and physicians are an integral part of the surveillance effort. Both aseptic meningitis and encephalitis are reportable conditions by clinicians under California Code of Regulations, Title 17, Section 2500.

Current testing for West Nile virus includes serology and PCR. Tests can be run on spinal fluid and serum. For optimal testing both specimens should be submitted. Patients with encephalitis, aseptic meningitis, or atypical Guillain-Barré will be tested for a combination of arboviruses, enterovirus, and other agents.

The investigation into possible West Nile virus infection in organ transplant recipients is ongoing. Clinicians caring for patients with febrile illnesses, particularly those associated with unexplained meningitis or encephalitis, occurring in the weeks following organ transplant should consider West Nile virus infection as a possible cause of illness. DHS will continue to work closely with CDC to determine ways to ensure that our blood supplies are safe as possible.

A full description of the clinical features and diagnostic test options for West Nile virus infection can be found at:

[http://www.cdc.gov/ncidod/dybid/westnile/resources/fact\\_sheet\\_clinician.htm](http://www.cdc.gov/ncidod/dybid/westnile/resources/fact_sheet_clinician.htm), and

<http://www.annals.org/issues/v137n3/full/200208060-00009.html>

California Department of Health Services West Nile Virus information is available at: <http://www.westnile.ca.gov/>

FDA information about West Nile virus and blood safety can be found at: <http://www.fda.gov/cber/safety/westnile.htm>

For more information on human case surveillance and testing, please contact Dr. Carol Glaser at (510) 307-8613 or Evelyn Tu at (510) 307-8606.

Attachment



Do your part to help California save energy. To learn more about saving energy, visit the following web site:  
[www.consumerenergycenter.org/flex/index.html](http://www.consumerenergycenter.org/flex/index.html)

714 P Street, Room 1492, P.O. Box 942732, Sacramento, CA 94234-7320  
(916) 657-1493

Internet Address: [www.dhs.ca.gov](http://www.dhs.ca.gov)

This is an official  
CDC Health Advisory

Distributed via Health Alert Network  
September 4, 2002, 12:10 EDT (12:10 PM EDT)

**CDCHAN-00097-02-09-04-ADV-N**

Possible West Nile Virus Infection in Organ Transplant Recipients - Information for Clinicians  
September 4, 2002

The Centers for Disease Control and Prevention (CDC), the Food and Drug Administration (FDA), the Health Resources and Services Administration (HRSA), the Georgia State Division of Public Health, and the Florida Department of Health are investigating illnesses among four recipients of organ transplants from a single donor. West Nile virus infection was confirmed in the organ donor by detection of viral genomic material by PCR in a serum sample obtained on the day of death. Because of injuries sustained during a motor vehicle accident, the donor had received numerous transfusions of blood products before death. West Nile virus infection has been confirmed in three of the organ recipients; the fourth recipient has not yet been tested. Additional clinical information about the recipients is indicated below.

Case 1 - A female patient received a kidney transplant on August 3, 2002. Approximately two weeks after transplant, while at home, the patient developed fever, backache, non-bloody diarrhea, 4-5 days of rash, and 6 days of non-specific upper respiratory symptoms. She was admitted to the hospital and over the next five days had progressive decline in mental status requiring mechanical ventilation. Serology for West Nile virus IgG performed at a commercial reference laboratory was reported as 1:16 by indirect fluorescent antibody (IFA); <1:16 was considered negative. A CSF sample obtained approximately two weeks after illness onset was positive for IgM antibody by MAC-ELISA at CDC. The patient's mental status is improving and she no longer requires ventilatory support.

Case 2 - A male patient received a kidney transplant on August 2, 2002. Approximately two and a half weeks after transplant, while at home, the patient developed fever, headache, backache, and fatigue. After readmission to the hospital, the patient's mental status worsened from mild confusion with tremulousness to unresponsiveness; the patient subsequently died. Laboratory testing of his serum at a commercial facility was negative for West Nile virus infection. Testing of brain tissues obtained at autopsy showed extensive West Nile virus infection by immunohistochemical staining and quantitative PCR (TaqMan).

Case 3 - A female patient received a liver transplant on August 2, 2002. While hospitalized, the patient developed a low-grade fever, cough, and malaise one week following transplant. Her symptoms resolved and the patient was discharged home. Laboratory evaluation of her serum for West Nile virus is underway.

Case 4 - A male patient received a heart transplant on August 2, 2002. The patient had been hospitalized for one month before transplant surgery. One week postoperatively, he developed ataxia followed by confusion, tremulousness, dysarthria, and obtundation. The patient required mechanical ventilation. West Nile virus IgM antibody testing of CSF and serum by MAC-ELISA at a Florida public health laboratory were strongly positive. The patient's mental status is improving and he no longer requires mechanical ventilation.

Although the cause of these illnesses remains under investigation, this cluster of illnesses should alert clinicians to the possibility of West Nile virus infection in organ transplant recipients and in patients receiving blood transfusions. Very little is known about West Nile virus infection in organ transplant recipients. Three of the four

organ recipients in this investigation developed encephalitis approximately 8-17 days following transplant surgery. Illness in the kidney transplant patients first presented as fever unresponsive to antimicrobial therapy followed by progressive deterioration in mental status, including ataxia, dysarthria, and tremulousness. All three required mechanical ventilation; one died from brainstem herniation. Despite extensive West Nile virus infection observed in brain tissue, initial West Nile virus serology on the deceased patient was reported as negative at a commercial reference laboratory.

The evidence to date indicates that virus was transmitted from donor to recipients through the transplanted organs. The organ donor may have acquired infection through a mosquito bite or from blood transfusions received before organ recovery. West Nile virus infection in organ transplant or blood transfusion recipients has not been previously reported and the risk for acquiring West Nile virus infection from donated organs or blood is not known. At present, data are insufficient to indicate any changes to existing organ or blood donor screening and testing practices. Public health officials have initiated precautionary measures including a recall of any remaining blood products from blood donors whose blood was given to the organ donor. An FDA alert regarding West Nile virus and blood safety can be found at <http://www.fda.gov/cber/safety/westnile.htm>. Questions for FDA may be directed to: 1-800-835-4709. This number has been set up to respond to both clinicians and the public.

The investigation into possible West Nile virus infection in organ transplant recipients is ongoing. Clinicians caring for patients with febrile illnesses, particularly those associated with unexplained meningitis or encephalitis, occurring in the weeks following organ transplant should consider West Nile virus infection as a possible cause of illness. To help assess the possible risk of transmission of West Nile virus by blood transfusion, persons with probable or proven West Nile virus infection who donated blood one to two weeks before their illness began and could have been viremic at the time of donation as well as persons with unexplained meningitis or encephalitis which developed 3 to 21 days after receipt of a blood transfusion should be reported to local or state health departments. In addition, transfusion services and blood banks should follow usual FDA-required procedures for reporting any fatalities thought to be associated with a blood transfusion and investigating any non-fatal adverse events.

Organs and blood are lifesaving and in short supply. Donating blood is safe. For patients who need an organ transplant or blood transfusion, the benefits far outweigh any risks.

A full description of the clinical features and diagnostic test options for West Nile virus infection can be found at [http://www.cdc.gov/ncidod/dvbid/westnile/resources/fact\\_sheet\\_clinician.htm](http://www.cdc.gov/ncidod/dvbid/westnile/resources/fact_sheet_clinician.htm) <<http://www.cdc.gov>>. West Nile virus infection can be diagnosed by detection of IgM antibody in cerebrospinal fluid or serum samples by MAC-ELISA. Clinicians who suspect West Nile virus infection can obtain rapid testing at state laboratories through state or local health departments.

#### Categories of Health Alert messages:

Health Alert: conveys the highest level of importance; warrants immediate action or attention.

Health Advisory: provides important information for a specific incident or situation; may not require immediate action.

Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action.